Notice of Allowability	Application No.	Applicant(s)
	10/002,318	MAGEE, DAVID PATRICK
	Examiner	Art Unit
	Vriete M. Elenagen	2624
	Krista M. Flanagan	2631
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.		
1. X This communication is responsive to After final amendment filed on 22 September 2005.		
2.  The allowed claim(s) is/are <u>2-8,11-19 and 22-31</u> .		
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some* c) None of the:</li> <li>1. Certified copies of the priority documents have been received.</li> </ul>		
2. Certified copies of the priority documents have been received in Application No.		
3. Copies of the certified copies of the priority documents have been received in this national stage application from the		
International Bureau (PCT Rule 17.2(a)).		
* Certified copies not received:		
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		
4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.		
5. CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.		
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached		
1)  hereto or 2)  to Paper No./Mail Date		
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date		
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).		
<ol> <li>DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.</li> </ol>		
		•
Attachment(s)	6 D Nation of Information	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>		atent Application (PTO-152)
_	6. ☐ Interview Summary Paper No./Mail Dat	e
<ol> <li>Information Disclosure Statements (PTO-1449 or PTO/SB/0 Paper No./Mail Date</li> </ol>	8), 7. 🛛 Examiner's Amendo	nent/Comment
4. Examiner's Comment Regarding Requirement for Deposit of Biological Material	8. 🛛 Examiner's Stateme	ent of Reasons for Allowance
•	9.  Other	

Application/Control Number: 10/002,318 Page 2

Art Unit: 2631

#### **DETAILED ACTION**

## Claim Objections

1. In view of the amendment filed on 22 September 2005, the Examiner withdraws the claim objections from the previous Office Action.

# Claim Rejections - 35 USC § 112

2. In view of the amendment filed on 22 September 2005, the Examiner withdraws the 35 USC 112 claim rejections from the previous Office Action.

## REASONS FOR ALLOWANCE

- 3. The following is an examiner's statement of reasons for allowance:
  - a. Regarding claims 2-11, 15-19, 30 and 31 the claims are allowable over prior art because the prior art fails to disclose a receiver system as described with a phase offset determiner operative to store the previous channel impulse response and update it with the phase corrected channel impulse response.
  - b. Regarding claims 12-14 the claims are allowable over prior art because the prior art fails to disclose a receiver system wherein the phase corrected channel impulse response is padded with zeros before being transformed into the portion of the channel estimate.
  - c. Regarding claims 22-29, prior art fails to disclose a method for determining an offset phasor comprising the steps of: initializing a first vector having an x component and a y component with a constant value for the x component and with a zero value for the y component; initializing a second vector having an x component and a y component with the x and y coordinates of the offset vector, respectively', incrementally rotating the first vector until the y component of the second vector is about zero; concurrent to rotating the first vector, incrementally rotating the second vector in an opposite direction of the first vector

Art Unit: 2631

until the y component of the second vector is about zero; and providing an offset phasor being final components of a last iteration of the first vector.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista M. Flanagan whose telephone number is (571) 272-2203. The examiner can normally be reached on Monday - Friday, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (571) 272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

K. Flanagan 20050928 Supervisory Patent Examiner
Technology Center 2800